

REMARKS

Claims 17-24 are pending in the present Application. Claims 17, 19, 22, and 24 have been amended, no claims have been added or canceled, leaving claims 17-24 for consideration upon entry of the present Amendment. No new matter has been introduced by these amendments. Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Claim Amendments

Claim 17 and 24 have been amended to remove the term “wherein the pallet is free of syndiotactic polystyrene.” The claim has been further amended to include the term “polystyrene resin consisting of a random polystyrene copolymer, a rubber-modified polystyrene, or a combination thereof.” Thus, the pallet comprises a polyphenylene ether resin, at least one flame retardant, and a polystyrene resin where the polystyrene resin consists of a random polystyrene copolymer, a rubber-modified polystyrene, or a combination thereof. Therefore, the polystyrene resin of the claimed pallet is selected from a certain class of polystyrene resins. Support for the amendment can be found in the Specification as filed at page 6.

Claim 19 has been amended to correct a typographical error.

Claim 22 has been amended to provide appropriate antecedent basis to independent claim 17, from which claim 22 depends.

Claim Rejections Under 35 U.S.C. § 112, First Paragraph

Claims 17-22 stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the Specification in such a way as to reasonably convey to one skilled in relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Specifically, the Examiner alleged that there is no mention in the Specification of a pallet being free of syndiotactic polystyrene. (Page 2, Office Action dated 3/6/2006). Independent claim 17, from which claims 18-22 ultimately depend, has been amended to remove the term “wherein the pallet is free of syndiotactic polystyrene.” Therefore, Applicants

respectfully request reconsideration and withdrawal of the rejections based on § 112, first paragraph.

Claim Rejections Under 35 U.S.C. § 102(b)

Claims 23 and 24 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Haaf et al. 4,410,651 (hereinafter “the ‘651 patent”), Haaf et al. 47,442,251 (hereinafter “the ‘251 patent”), Abolins et al. 4,504,613 (hereinafter “the ‘613 patent”) or Lee, Jr. 5,008,314 (hereinafter “the ‘314 patent”). Applicants respectfully traverse this rejection.

The ‘651 patent generally discloses blends of polyphenylene ether resin and a small amount of certain ethylene copolymers or terpolymers containing hydroxyl and carbonyl functional groups, optionally including impact modifier wherein articles made from the blends have better Gardner impact strength (abstract).

The ‘251 patent generally discloses compositions of polyphenylene ether resin, optionally containing an impact modifier by incorporation of small amounts of a copolymer of ethylene and methyl acrylate wherein articles made from the compositions have better Gardner impact strength (abstract).

The ‘613 patent generally discloses that the ductile impact strength and tensile elongation of flame retardant compositions of a polyphenylene ether resin and a poly(alkenyl aromatic) are upgraded by the addition of only small amounts, typically from about 0.1 to about 10 parts by weight, of high molecular weight polyfunctional esters or low molecular weight saturated polyesters (abstract).

The ‘314 patent generally discloses a thermoplastic blend for molding articles with resistance to environmental stress cracking and with good melt flow properties comprising a polyphenylene ether resin having a low intrinsic viscosity and a polystyrene resin having a high intrinsic viscosity. The composition can further contain an impact modifier and/or a flame retardant (abstract).

To anticipate a claim, a reference must disclose each and every element of the claim. *Lewmar Marine v. Varient Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987). Moreover, the single source must disclose all of the claimed elements “arranged as in

the claim.” *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984).

None of the ‘651, the ‘251, the ‘613, and the ‘314 patents anticipates claim 23 or claim 24 as each of them fails to teach each and every element of the instant claims. Specifically, none of the above references teaches the particular limitation of an amount of flame retardant sufficient to impart a degree of flame retardancy to the pallet to pass UL 2335 protocol or the limitation that the pallet meets or exceeds Underwriters Laboratory UL 2335 protocol for pallets.

Choosing the appropriate type and amount of flame retardant to be added to a resin that will be prepared into an article would depend upon many factors such as the article size, shape, function, end use, etc. For example, the UL 2335 protocol is to classify plastic pallets for fire hazards. Pallets are large structures often used to hold many hundreds of pounds of material. Such articles are very different from consumer electronic products, for example. Each application, whether for a pallet or for an electronic product, would dictate the particular amounts of flame retardant present in the polymer resin to render an article prepared from that resin safe for the particular application. A general disclosure of flame retardants in a resin, without more, would not anticipate particular amounts of flame retardant required to pass a certain protocol such as UL 2335.

None of the cited references teaches the amount of a flame retardant to be used in a pallet to impart a degree of flame retardancy to pass the UL 2335 protocol for pallets. These references are not directed to pallets and do not discuss in any way articles having a flame retardancy to pass the UL 2335 protocol for pallets, let alone any other testing procedure standard. As this particular element of claims 23-24 is not taught by any of the four cited references, these references do not anticipate the instant claim.

Additionally, none of the references teaches a pallet meeting or exceeding Underwriters Laboratory UL 2335 protocol for pallets. As these particular limitations of claims 23-24 are not taught by any of the four cited references, these references do

not anticipate the claims. Therefore, Applicants respectfully request reconsideration and withdrawal of the 102(b) rejections over claims 23 and 24.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 23 and 24 stand rejected under 35 U.S.C. 103(a) as obvious over the '651 patent, the '251 patent, the '613 patent, or the '314 patent. Applicants respectfully traverse this rejection.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). Establishing a prima facie case of obviousness requires that all elements of the invention be disclosed in the prior art. *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970).

Both instant Claims 23 and 24 require that the amount of a flame retardant in a plastic pallet composition be sufficient so as to impart a degree of flame retardancy to the pallet to pass UL 2335 protocol for pallets and that the resulting pallets meet or exceed UL 2335. For reasons presented above, none of the cited references teaches or suggests these elements. Particularly, none of the references teaches articles meeting stringent flame retardancy protocols, let alone a pallet having an amount of flame retardant claimed or where the pallet meets or exceeds UL 2335. As all elements of claims 23-24 have not been taught or suggested by the references, they are not obvious over these references.

As mentioned, none of the references teach a pallet that meets or exceeds Underwriters Laboratory UL 2335 protocol for pallets. The claims are directed to pallets and only pallets. The Examiner has stated that “[p]allets is the intended use and as such it has not patentable significance.” (Page 3, Office Action dated 3/6/2006). The Applicants respectfully disagree. The Applicants are claiming particular plastic pallets that pass a rigorous flame retardancy requirement as established by Underwriters Laboratory. The Applicants are not claiming the particular resin materials used to make the pallets, but the pallets themselves.

Accordingly, the Applicants respectfully disagree with the Examiner that the pallets are merely and “intended use.”

Furthermore, the Examiner has alleged that the references teach molded articles and that it would have been obvious to use the composition of the impact resistant, flame-retardant compound for molding pallets. The Applicants respectfully disagree. Although the references may generally teach molding polyphenylene ether resins into articles, they do not teach or suggest molding pallets out of the countless possibility of article types. Pallets are particularly large objects used for supporting the weight of other objects. They are significantly different from other articles, such as small appliances or business machine components (the ‘613 patent, col. 6, lines 20-42.). Furthermore, the claimed pallets are required to meet or exceed Underwriters Laboratory UL 2335 protocol for pallets, a protocol to ensure the safe use and storage of pallets. General teaching of a molded article is insufficient to render obvious pallets, and especially not pallets meeting or exceeding UL 2335.

Based on the foregoing arguments, reconsideration and removal of the rejections are respectfully requested.

Double Patenting

Claims 17-24 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 6,784,234 (“the ‘234 patent”). The ‘234 patent is a commonly owned patent and Applicants respectfully submit a terminal disclaimer concurrently with this Amendment. Removal of the rejection is respectfully requested.

Information Disclosure Form 1449 with Incomplete Initialing

It is respectfully noted that the three references (JP 05096587, JP 05337993, and [www.kwpc.com/kwpc/markets/directex\(3,5,6 and overview\)\)](http://www.kwpc.com/kwpc/markets/directex(3,5,6%20and%20overview))) on page 7 of the Information Disclosure Statement that was mailed on May 10, 2004 were not initialed by the Examiner. The Applicants respectfully request an initialed Information Disclosure Citation sheet with the next substantive action.


It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 50-1131.

Respectfully submitted,

CANTOR COLBURN LLP

By:



Roberta L. Pelletier
Registration No. 46,372

Yong Zhao
Registration No. 57,014

Date: July 14, 2006
Customer No.: 23413
Telephone: (860) 286-2929